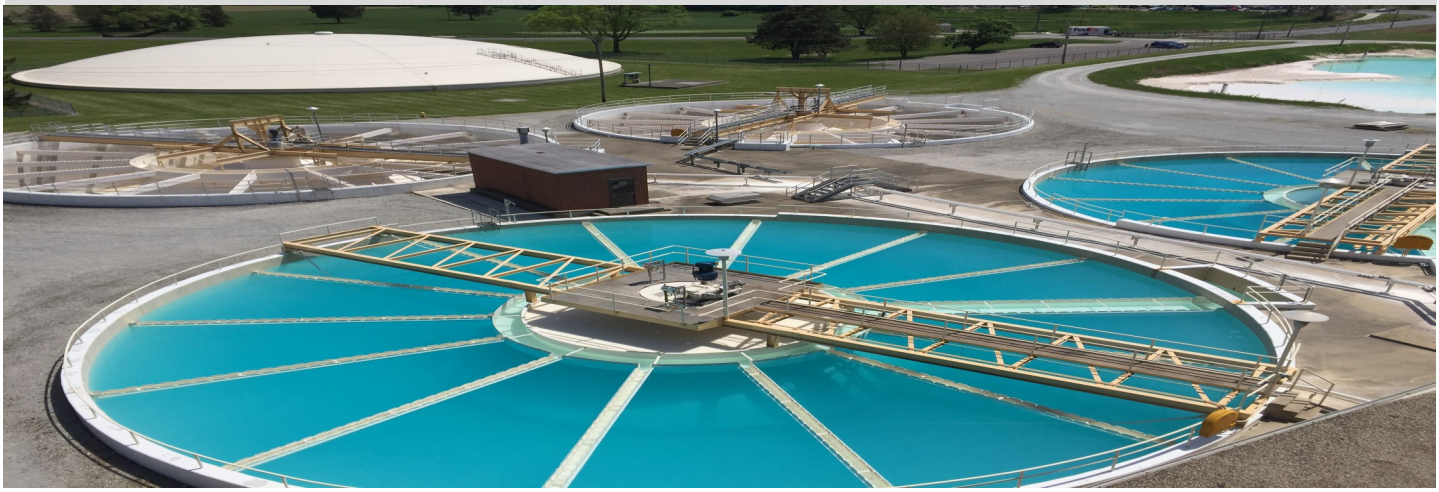
Annual Drinking Water Quality Report

Reporting Year 2020 Public Water System (PWS) ID#: OH-5501612

300 East Staunton Road, City of Troy, Ohio www.troyohio.gov



The City of Troy Public Water System (PWS) is pleased to present this report and provide information on the quality of Troy drinking water. Within this report is general health information, water quality test results for the period January 1 -December 31, 2020, how to participate in decisions concerning your drinking water, and Troy water system contacts. We have a current, unconditioned license to operate our public water system.

Samples from 10 deep wells are analyzed monthly for over 100 compounds by an EPA-certified independent lab, to verify our source water is absolutely safe.

Our water source

The City of Troy drinking water source is the Great Miami Buried Valley Aquifer (GMBVA). This is an enormous water-bearing sand and gravel formation associated with the Great Miami River. The GMBVA extends from north of Troy to the Ohio River, ranging from 30 to 300 feet in depth and from 1 to 3 miles wide. This aquifer is replenished by underground sources, precipitation, and riverbed filtration. Troy utilizes 10 production wells to pump water from this aquifer for treatment at the water plant. These wells are adjacent to the Great Miami River and are located at the Miami Shores Golf Course and the Troy Community Park. Well water is pumped to the Water Treatment Plant (WTP) where it is softened, clarified, disinfected, stabilized, and filtered prior to being pumped to our water consumers. In 2020, the finish water averaged 115 parts per million (ppm) hardness and 66 ppm of alkalinity, with an average pH of 8.69.

In 2020, our treatment facility provided approximately 1.44 billion gallons of treated drinking water to consumers in Troy, Miami County, West Milton, and Ludlow Falls. Our treated water quality meets or exceeds all of the standards that are set forth by the State of Ohio and the United States Environmental Protection Agency.

For more information about this report or your drinking water, please call Jeff Monce, Water Plant Superintendent, or Ralph Walters, Assistant Plant Superintendent, at (937)339-4826, or reach them via email: jeff.monce@troyohio.gov or ralph.walters@troyohio.gov.

Source Water Assessment

The City of Troy started a source water monitoring program in 1984. In 1992, Troy developed a Wellhead Protection program. This identifies potential sources of groundwater contamination within a 5-yr. time of travel zone around our wells. We have 25 monitoring wells to test water quality beyond our well fields. Zoning regulations have been adopted to further reduce potential contamination within a 1 yr. time of travel zone. Effective public outreach efforts to inform our residents and businesses are also an important part of this plan for safe-guarding our vital water resource. In 2020, we sampled 19 of these remote sites, from which it would take a contaminant years to reach our production wells. We also draw monthly samples for contaminants from each of our production wells.

A Source Water Assessment and Protection (SWAP) Plan is a key component of Troy's wellhead protection and monitoring program. An update of this plan was completed in 2016, and approved by the Ohio EPA in 2017. In 2018, the City of Troy received recognition from the Ohio EPA for exceptional implementation of the Drinking Water Source Protection Plan. The SWAP Plan is available at our office for review by calling (937)339-4826. Due to the highly permeable sand and gravel formation above our aquifer, this SWAP plan designates our water supply with a *high susceptibility* rating. Safe public practices are thus extremely important in protecting our source water from surface contaminants.

What are sources of contamination to drinking water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a heath risk. More information about contaminants and potential health effects can be obtained by calling the Federal EPA Safe Drinking Water Hotline (1-800-426-4791).

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The 2019 Consumer Confidence Report contained some incorrect or unrequired data, an updated data table can be obtained by contacting Jeff Monce Supt. or Ralph Walters, Assistant Plant Superintendent, at (937)339-4826, or via email:jeff.monce@troyohio.gov or ralph.walters@troyohio.gov.

In 2020, our PWS was sampled as part of the State of Ohio's Drinking Water Per-and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit pfas.ohio.gov.

2020 Sampling Results

The EPA requires regular sampling to ensure drinking water safety. The City of Troy collected hundreds of water samples to determine the presence of any hazardous contaminants during 2020. The Ohio EPA does not requires us to monitor for all contaminants every year, as concentrations of many are nonexistent , or very low and stable. In those cases, the most recent sample data are included, along with the year in which the sample was taken. 30 bacteriological samples from the City of Troy distribution system were taken each month in 2020, with no coliform or E. coli bacteria ever detected. The table below shows only those contaminants that were detected in the treated drinking water.

City of Troy Annual CCR 2020

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Total Chlorine (ppm)*	2020	4	4	0.85	0.83-0.85	No	Water additive used to control microbes
Fluoride (ppm)**	2018	4	4	0.25	N/A	No	Erosion of natural deposits
Haloacetic Acids [HAA5] (ppb)	2020	60	N/A	3.3	0.0-6.6	No	By-product of drinking water Chlorination
TTHMs [Total Trihalomethanes] (ppb)	2020	80	N/A	19.75	16.8-22.7	No	By-product of drinking water chlorination

LEAD AND COPPER

Contaminants (Units)	Action Level (AL)	Individual Results over the AL	90% of Test levels were less than	Violation	Year Sampled	Typical Source
Lead (ppb)	15	N/A	0.0 ppb	No	2019	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb					
Copper (ppm)	1.3	N/A	0.046 ppm	No	2019	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm					

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AVERAGE DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2020	6.15	5.3-7.0	By-product of disinfection: component of Trihalomethanes (TTHMs) shown in the table above
Bromoform (ppb)	2020	2.4	2.4-2.7	By-product of disinfection: component of Trihalomethanes (TTHMs) shown in the table above
Chloroform (ppb)	2020	4.7	3.6-5.7	By-product of disinfection: component of Trihalomethanes (TTHMs) shown in the table above
Dibromochloromethane (ppb)	2020	6.55	5.8-7.3	By-product of disinfection: component of Trihalomethanes (TTHMs) shown in the table above

* The value of 0.85 as the amount detected is the highest quarterly running annual average of chlorine measured in the bacteria samples taken 30 times a month from the City of Troy Distribution system from January 1, 2020 to December 31, 2020.

** This is amount of fluoride naturally occurring in the Troy well water that remains in the finished water after treatment. Troy does not add fluoride to the water.

Definitions

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Not applicable (N/A)

Secondary Maximum Contaminant Level (SMCL): SMCLs are established to regulate the aesthetics of drinking water like taste and odor.

Picocuries per liter (pCi/L): A common measure of radioactivity.

Lead Educational Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Troy is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/safewater/lead.

The City of Troy performed U.S. EPA-mandated Lead and Copper Sampling in June 2019. Samples from 30 locations within Troy were analyzed by an independent approved laboratory. None of the 30 samples from the Troy distribution system were in exceedance of the action levels for lead or copper. Lead and copper sampling will be conducted in 2022

How can I participate in drinking water decisions?

You may express concerns regarding any water issue to the Troy City Council, which meets on the first and third Mondays at 7 p.m. Meetings are held on the second floor in the Council Chambers at City Hall, 100 S. Market St., Troy. Notices of special meetings, including the Utilities Committee meetings, are posted on the City of Troy website, www.troyohio.gov, and also at City Hall.

Year 2020 in Review:

In addition to serving our Troy customers, we pumped 142,205,803 gallons of drinking water to Miami County and 114,775,360 gallons to West Milton and Ludlow Falls.

Other statistics include 33 main breaks repaired, 30 new taps made, 112 new services installed, and 282 customer high-usage alerts investigated.